

CLAIMS

- [1] A method for fermentation and culture characterized in that a material derived from an edible plant was fermented by a facultative anaerobic gram-negative bacterium which lives in a symbiotic relationship exclusively with a plant and simultaneously said facultative anaerobic gram-negative bacterium is cultured.
- [2] The method for fermentation and culture according to claim 1 characterized in that said material is exclusively edible.
- [3] The method for fermentation and culture according to claim 1 or 2 characterized in that starch is fermented as a carbon source.
- [4] The method for fermentation and culture according to any of claims 1 to 3 characterized in that said facultative anaerobic gram-negative bacterium is bacillus.
- [5] The method for fermentation and culture according to claim 4 characterized in that said facultative anaerobic bacillus belongs to the family *Enterobacteriaceae*.
- [6] The method for fermentation and culture according to claim 4 characterized in that said facultative anaerobic bacillus belongs to the genus *Pantoea*, *Serratia* or *Enterobacter*.
- [7] The method for fermentation and culture according to claim 4 characterized in that said facultative anaerobic bacillus

is *Pantoea agglomerans*.

[8] The method for fermentation and culture according to any of claims 1 to 7 characterized in that said edible plant is a food grain, seaweed or a bean, or a mixture thereof.

[9] The method for fermentation and culture according to claim 8 characterized in that a material derived from said food grain is wheat flour, rice powder, wheat bran powder, rice bran or sake lees.

[10] The method for fermentation and culture according to claim 8 characterized in that a material derived from said seaweed is brown seaweed powder, mekabu powder or kelp powder.

[11] The method for fermentation and culture according to claim 8 characterized in that a material derived from said bean is a bean curd refuse.

[12] A fermented plant extract characterized by being obtained by the method for fermentation and culture according to any of claims 1 to 11.

[13] Fermented plant extract powder characterized by being obtained from the fermented plant extract according to claim 12.

[14] A fermented plant extract composition characterized in that the fermented plant extract according to claim 12 or the fermented plant extract powder according to claim 13 is

contained.

[15] The fermented plant extract composition according to claim 14 characterized in that said fermented plant extract composition is a pharmaceutical, a pharmaceutical for animals, a quasi drug, a cosmetic, a food, a functional food, a feedstuff, or a bath agent.

[16] The fermented plant extract according to claim 12 characterized by exhibiting physicochemical properties which are an ability of macrophage activation even with the presence of polymyxin B.

[17] The fermented plant extract according to claim 12 or 16 characterized by having an immunopotentiation activity.